

17. Distributed Generation

Natural Resources Defense Council (NRDC)

The NRDC is very adamant about getting the electric utilities incentives correct. Currently they have incentive to block distributed energy projects or energy efficiency. And as long as utilities have an adversarial relationship with these good public benefit projects, it's going to be like pulling teeth every time you want to promote these technologies.

It's very important to address regulatory barriers, address the regulatory incentives that utilities have so they can become partners with the state and the citizens in achieving a really balanced and sustainable and clean energy future.

Environmental Advocates

In the section of the State Energy Plan on distributed generation and renewable fuels, a bullet mentions regulatory barriers to distributed generation and at the technical briefing environmental regulations were mentioned as a barrier to renewable energy. If there are environmental regulations that are barriers to renewable energy, then they should be discussed in the State Energy Plan and recommendations put forward for overcoming those barriers.

Sierra Club, NYC Group

The State has actively supported programs for energy efficient appliances, machinery, and buildings. New technologies for power generation should also be supported. These have the potential to create heat and electricity with reduced pollution and decreased resource use. Such technologies include fuel cells, geothermal, clean distribution, renewable energy, and others. The creation of many new jobs is likely to result from employment of these technologies. The Draft State Energy Plan should analyze this possibility.

Response: The Energy Planning Board in the State Energy Plan acknowledges and details policy objectives concerning the development and use of distributed generation and combined heat and power technologies. Throughout the Energy Plan, distributed generation is acknowledged as a major way to address system reliability concerns that, in tandem with demand management strategies, will ensure adequate and diverse supplies of energy.

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The New York State Department of Environmental Conservation (DEC) is currently developing emissions standards for distributed generation technologies, and NYSERDA is working with DEC and various groups to ensure that the standards are rational and fair. NYSERDA is collecting data to characterize the emissions from distributed generation equipment through its *Efficiency and Renewable Energy Potential Assessment*. In the State Energy Plan, the Energy Planning Board sets national leadership in deployment of clean distributed generation technologies as the State's goal. In particular, the Energy Plan calls for continuing research and development for distributed generation and CHP technologies in connection with renewable energy resources and facilitating interconnection of distributed generation and CHP into the electricity system. Investment tax credits are recommended as a means of spurring private investment in these technologies. See Section 1.3 of the Energy Plan.

The Joint Supporters

The 2002 Draft State Energy Plan needs to go further than it does in setting objectives and in measuring progress toward the goals of developing and securing indigenous resources and realizing energy independence for North America.

More effort is needed by the State and in the Draft State Energy Plan to recognize the State's continuing interest in promoting market transformation in demand resources.

The definition of energy facilities should include fuel facilities (transport and storage), generation (large, small, combined heat and power, renewables), transmission, distribution, and on-site facilities (on-site generation, meters, energy management systems, and communications and energy usage systems). Building codes also need further reform.

The Draft State Energy Plan should be dramatically expanded in the final Plan to include numerous distribution and transmission upgrades, *e.g.*, the numbers should be tripled to 75 or more across the State. LIPA should adhere to a similar standard.

Interconnection is another area where New York's position as a market leader has been overshadowed by inertia.

Response: The State Energy Plan is a plan for New York State and not North America. Nevertheless, the Energy Plan recognizes the important roles played by surrounding states and the northeastern states in general in addressing regional and national energy issues. The State Energy Plan supports the State's continued commitment

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to energy efficiency and renewable energy development and to transformation of energy markets toward self-sustaining energy efficiency and demand management. The State Energy Plan supports and encourages investment in energy and transportation infrastructures, including transmission and distribution, distributed generation and alternative energy development, roadways and public transportation, among other areas, as recommended in Section 1 of the State Energy Plan. Regarding interconnection issues, the Energy Plan supports easier interconnection and standardization of interconnection procedures, while recognizing that many complex issues need to be resolved before transparent interconnection can be realized.

Plug Power, Incorporated

We are enthusiastic about the increased interest generated in the area of distributed generation and are encouraged that it is referenced in the Draft State Energy Plan. We need the State to do more.

Robert Lambert

The overall plan should allow for the location of electric generating plants so that existing distribution systems could carry newly generated power, electric (with steam to follow) for the immediate community.

Currently operating generating plants using fossil fuels to should be converted and upgraded to cogenerating units where excess steam can supply surrounding communities with heating, cooling, refrigeration, and electricity at greatly reduced rates.

Lake Shore Environmental Action of Wolcott

The present plan seems to favor large inefficient centralized producers. Cogeneration should be encouraged.

Response: The State Energy Plan encourages the implementation of combined heat and power (cogeneration) facilities. The recommendation that existing facilities be converted is, in general, infeasible because of location and technology constraints. Currently, most existing, large-scale electric generation plants are located in remote areas. The cost of piping thermal energy in the form of steam and hot water to end users would be prohibitive. In addition, the local use of thermal energy is usually very small when compared with the amount of thermal energy generated by a typical large power plant.

For years New York State and NYSERDA have supported the development of highly efficient combined heat and power (cogeneration) systems where the generating

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equipment is appropriately located and the thermal energy output is well matched to the needs of a single customer or group of customers. In addition to ConEdison's longrunning CHP steam generation system, a more recent success story in cogenerated, district energy is Jamestown, New York, a project supported by NYSERDA.

Ann Link

We are concerned that the Draft State Energy Plan's preoccupation with increased use of natural gas for large-scale generation is preempting appropriate attention from natural gas fired distributed generation and combined heat and power systems (CHP) in favor of other clean distributed generation technologies. In fact, one of the best measures available to extend the natural gas supply is to shift generation into CHP with its efficiencies in the 70-80 percent range. We anticipate that increased use of competitive natural gas pipelines and natural gas distribution infrastructures should make natural gas available for distributed generation and CHP engine and turbine technologies that meet emission requirements. Therefore, these technologies should not be disadvantaged in forecasts and in the identification and removal of disincentives to deployment.

Response: NYSERDA is very involved with and optimistic about the potential contributions of distributed generation and combined heat and power technologies (CHP). In fact, distributed generation is a consequential ingredient in the electricity deregulation model. Increasing distributed generation contributes to a free electricity market because it offers direct competition with energy services companies.

See Section 3.4, Electricity Assessment, of the State Energy Plan for a discussion of distributed generation. The New York State Public Service Commission has extended and expanded the system benefits charge in 2001, providing nearly \$57 million over the next five years to improve the viability of distributed generation and CHP as economic energy options in New York State.

The Joint Supporters

To assess resource potential more fully, we think the combined heat and power analysis NYSERDA has already performed, or had performed by Nexus, will be fully reflected in the State Energy Plan's analysis and resource assessments.

Response: The Energy Nexus Study is not complete. A draft report is undergoing major revisions in response to feedback from the Project Advisory Board. However, selected information from the partially revised report was used in the regional electricity

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load and price modeling in the State Energy Plan. See Section 3.4, Electricity Assessment.

Battery Park City Authority

The State's energy planners can encourage more energy efficiencies by making certain that on-site generation, for example, can proceed without red tape and an endless bureaucracy.

New York Gas Group (NYGAS)

NYGAS conditionally supports the statement in the Draft State Energy Plan that the State should support and encourage the development and use of distributed generation and combined heat and power. However, the State Energy Plan should avoid policies that subsidize development.

Lake Shore Environmental Action of Wolcott

Co-generation should be encouraged.

Battery Park City Authority

The State's energy planners can encourage more energy efficiencies by making certain that on-site generation, for example, can proceed without red tape and an endless bureaucracy.

Response: The State Energy Plan reflects a major commitment by the Energy Planning Board to distributed generation and combined heat and power systems, sometimes referred to as cogeneration, because these technologies significantly contribute to increasing the State's energy diversity and facilitating economic development. Section 3.B. of Section 1.3 of the State Energy Plan contains recommendations that enunciate New York's goal of becoming a national leader in the deployment of clean distributed generation technologies. The State Energy Plan calls for the State to continue with research and development of these technologies, support new installations, improve interconnections with the electricity system, and consider investment tax credits for environmentally-sound, cost-effective distributed generation and combined heat and power systems.

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Don Neuroth

I'm a little annoyed that we cannot generate our own power on a micro basis because of some of the rules and regulations. We cannot generate power for ourselves without being penalized for it. If you want to have true competition, that would be one political way you could have it come about, by moving some of these roadblocks so we can generate our own power.

Response: Impediments to self-generation are being examined by the New York Public Service Commission and, to the extent that public and worker safety can be assured and inappropriate subsidies can be avoided, those impediments are being removed.

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